

SITE: V.C. Chemical Social Cir  
BREAK: 2.2  
OTHER: v. 26



*Transmitted Via First Class Mail*

December 9, 2005

Harold Arnold  
HA County LLC  
PO Box 391  
Monroe, GA 30655

Re: Soil Sampling Data Summary Report for  
315 Dove Point, Social Circle, GA  
BBL Project #: 85533

Dear Mr. Arnold:

On August 25, 2005 and with your permission, Blasland, Bouck & Lee, Inc. (BBL) collected soil samples from the property located at 315 Dove Point in Social Circle, Georgia. These activities were performed on behalf of Exxon Mobil Corporation (ExxonMobil) to provide data to evaluate the potential impacts of a former fertilizer manufacturing plant whose facilities appear to have been located in the vicinity of the property.

All soil samples collected were tested in the field to determine the approximate levels of arsenic and lead, which research has shown may be related to past operations of the former fertilizer plant. Based on these field test results, select samples were submitted to, and analyzed by, a laboratory approved by the United States Environmental Protection Agency (USEPA).

The purpose of this letter is to describe the soil sampling activities that were performed at the property and to present the results. Also included are photos of the inspection that was performed to document the condition of the property at the time of sampling (Attachment 1). Copies of this report are being submitted to the USEPA.

#### **Soil Sample Collection Activities**

Prior to sampling, the locations of underground utilities were identified by a utility locating service to minimize the possibility of disrupting services to the property and protect the safety of the workers.

Two types of soil samples were collected from your property as follows:

- Surface soil samples were collected from 0 to 6 inches below ground surface from five locations in both the front and back yards. The five front yard surface samples were mixed together in equal amounts and then tested in the field to determine the approximate concentrations of arsenic and lead. Field testing was performed using a portable X-ray fluorescence (XRF) device. The front yard mixed sample was then sent to the laboratory for



analysis. This process was repeated for the five backyard samples. All samples submitted to the laboratory were analyzed for metals (including arsenic and lead) and pH (soil acidity).

- Deeper soil samples were collected from one location in the front yard and one location in the back yard. The locations of these deeper soil samples are shown on Figure 1. Samples were collected using hand augers or by pushing hollow steel tubes into the ground to the required sample depth. At each location, soil samples were collected from 0.5 to 2 feet, 2 to 4 feet, 4 to 6 feet, and 6 to 8 feet below ground surface. These samples were tested in the field using the XRF device described above to determine the approximate concentrations of arsenic and lead. Based on these results, select samples were sent to the laboratory and analyzed for metals (including arsenic and lead) and pH (soil acidity).

A list of the soil samples collected from the property is provided in Table 1.

#### **Results of the Soil Sampling**

The USEPA has established screening levels (i.e., levels that trigger additional assessment and evaluation) for metals. Field measurements and laboratory analytical results indicate that the concentrations of arsenic and lead are below the USEPA's screening levels of 27 milligrams per kilogram (mg/kg) and 400 mg/kg, respectively. Laboratory analytical results indicate that aluminum, iron, and vanadium were detected above the USEPA screening levels in the samples collected from your property. Laboratory analytical results for the soil samples collected from the property are provided in Table 2.

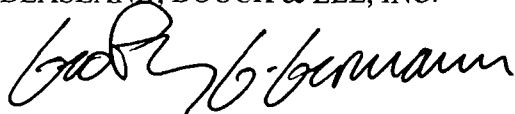
#### **Conclusion**

As described above, all soil samples collected at your property contained concentrations of arsenic and lead **below** USEPA's screening levels of 27 mg/kg and 400 mg/kg, respectively. According to USEPA, the arsenic and lead concentrations are protective of human health and the environment. Laboratory analytical results indicate that aluminum, iron, and vanadium were detected above the USEPA screening levels in the samples collected from your property. ExxonMobil is submitting these results to the USEPA. We will work with these agencies to determine what further actions (if any) are necessary for your property, and will keep you informed. Any necessary actions for your property will be described in the upcoming *Removal Action Delineation Report/Removal Action Work Plan* that will be prepared by BBL on behalf of ExxonMobil and reviewed and approved by USEPA. This plan will be prepared upon completion of all sampling activities required by USEPA.

Thank you once again for granting ExxonMobil access to the property to conduct these soil sampling activities.

Sincerely,

BLASLAND, BOUCK & LEE, INC.



Geoffrey G. Germann, P.E.  
Senior Engineer II

GGG/cbc

Enclosures:

Table 1 – Summary of Analytical Program for Samples Collected from 315 Dove Point

Table 2 – Summary of Analytical Results for Detected Metals in Soil Samples Collected from 315 Dove Point

Figure 1 – Sample Location Map for 315 Dove Point

Attachments:

Attachment 1 – Photographs

cc: D. Andrews, USEPA  
B. Frink, ExxonMobil  
R. Wallis, ExxonMobil  
M. Ross, ExxonMobil

## **Tables**

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**Table 1**  
**Summary of Analytical Program for Samples Collected from 315 Dove Point**  
**Social Circle, Georgia**

Sample Name	Depth (feet)	Sample Date	Arsenic and Lead Field Measurement	Laboratory Measurement		Comments
				Metals	pH	
Front Yard Samples						
SCSB-315DT-1	0-0.5	08/25/05	X	X	X	Combination (composite) surface soil sample of five locations from the front yard.
SCSB-315DT-1	0.5-2	08/25/05	X	X	X	Soil sample collected from the front yard
SCSB-DUP-8	0.5-2	08/25/05		X	X	Duplicate sample of SCSB-315DT-1 (0.5-2)
SCSB-315DT-1	2-4	08/25/05	X	X	X	Soil sample collected from the front yard
SCSB-315DT-1	4-6	08/25/05	X			Soil sample collected from the front yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.
SCSB-315DT-1	6-8	08/25/05	X			Soil sample collected from the front yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.
Back Yard Samples						
SCSB-315DT-2	0-0.5	08/25/05	X	X	X	Combination (composite) surface soil sample of five locations from the back yard.
SCSB-315DT-2	0.5-2	08/25/05	X	X	X	Soil sample collected from the back yard
SCSB-315DT-2	2-4	08/25/05	X	X	X	Soil sample collected from the back yard
SCSB-315DT-2	4-6	08/25/05	X			Soil sample collected from the back yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.
SCSB-315DT-2	6-8	08/25/05	X			Soil sample collected from the back yard not analyzed because arsenic and lead in the 2-4 foot interval were below USEPA screening levels.

**Notes:**

1. Samples depths are measured in feet below ground surface.
2. Laboratory measurements were performed by TestAmerica, Inc. of Nashville, Tennessee.
3. Sample locations are shown on Figure 1.

Table 2  
Summary of Analytical Results for Detected Metals in Soil Samples Collected from 315 Dove Point  
Social Circle, Georgia

Analyte	Screening Level	Units	Concentration in Sample:				
			SCSB-315DT-1	SCSB-315DT-1	SCSB-315DT-1-DUP	SCSB-315DT-1	SCSB-315DT-2
			0 - 0.5 ft bgs 8/24/2005	0.5 - 2 ft bgs 8/24/2005	0.5 - 2 ft bgs 8/24/2005	2 - 4 ft bgs 8/25/2005	0 - 0.5 ft bgs 8/24/2005
<b>Metals</b>							
Aluminum	76000	mg/kg	35400 J	32500 J	27800 J	33800 J	55000 J
Antimony	31	mg/kg	2.85 J	1.4 J	2.83 J	1.55 J	1.66 J
Arsenic	27	mg/kg	6.35	5.14	5.22	3.06	8.02
Barium	5400	mg/kg	106	48.7	49.6	38.6	75.5
Calcium	--	mg/kg	387	363	390	112	438
Chromium	210	mg/kg	32.9	34.4	56.1	52.9	39.7
Cobalt	900	mg/kg	7.78	2.91	2.19	3.28	3.21
Copper	3100	mg/kg	19.2 J	18.9 J	15 J	24.1 J	27 J
Iron	23000	mg/kg	35800 J	47500 J	43700 J	45900 J	45400 J
Lead	400	mg/kg	26.3	19.4	15.5	17.5	19.3
Magnesium	--	mg/kg	1680 J	638 J	624 J	853 J	858 J
Manganese	1800	mg/kg	190 J	126 J	113 J	187 J	130 J
Mercury	23	mg/kg	0.052 J	0.0569 J	0.0548 J	0.116 U	0.0601 J
Nickel	1600	mg/kg	8.67	5.81	4.35	10.4	11.7
Potassium	--	mg/kg	1840	678	549	925	1450
Selenium	390	mg/kg	3.71 J	3.47 J	2.28 UJ	3.11 J	2.66 J
Vanadium	78	mg/kg	66.7	78.9	78.2	75.5	82.4
Zinc	23000	mg/kg	48.6	27.5	23	35.6	56.3
<b>Miscellaneous</b>							
% Dry Solids	--	%	83	87.8	85	83	86.1
pH	--	pH Units	5.2	5.2	5.2	5.5	5.5

**Notes:**

bgs - below ground surface

J - estimated value

mg/kg - milligrams per kilogram

U - not detected

-- no screening level

Shaded value exceeds the screening level

**Table 2**  
**Summary of Analytical Results for Detected Metals in Soil Samples Collected from 315 Dove Point**  
**Social Circle, Georgia**

Analyte	Screening Level	Units	Concentration in Sample:	
			SCSB-315DT-2	SCSB-315DT-2
			0.5 - 2 ft bgs 8/24/2005	2 - 4 ft bgs 8/24/2005
<b>Metals</b>				
Aluminum	76000	mg/kg	52300 J	82500 J
Antimony	31	mg/kg	3.88 J	1.17 J
Arsenic	27	mg/kg	6.35	6.86
Barium	5400	mg/kg	52.4	76.6
Calcium	--	mg/kg	292	41.1
Chromium	210	mg/kg	42.4	46.7
Cobalt	900	mg/kg	3	7.37
Copper	3100	mg/kg	25.8 J	41.1 J
Iron	23000	mg/kg	47900	57000
Lead	400	mg/kg	19.4	20.9
Magnesium	--	mg/kg	799 J	3080 J
Manganese	1800	mg/kg	97.2 J	224 J
Mercury	23	mg/kg	0.0641 J	0.11 U
Nickel	1600	mg/kg	10.3	12.3
Potassium	--	mg/kg	1210	4140
Selenium	390	mg/kg	3.65 J	4.69 J
Vanadium	78	mg/kg	85.3	94.5
Zinc	23000	mg/kg	51.8	74.5
<b>Miscellaneous</b>				
% Dry Solids	--	%	87.4	87.4
pH	--	pH Units	4.8	5.3

**Notes:**

bgs - below ground surface

J - estimated value

mg/kg - milligrams per kilogram

U - not detected

-- no screening level

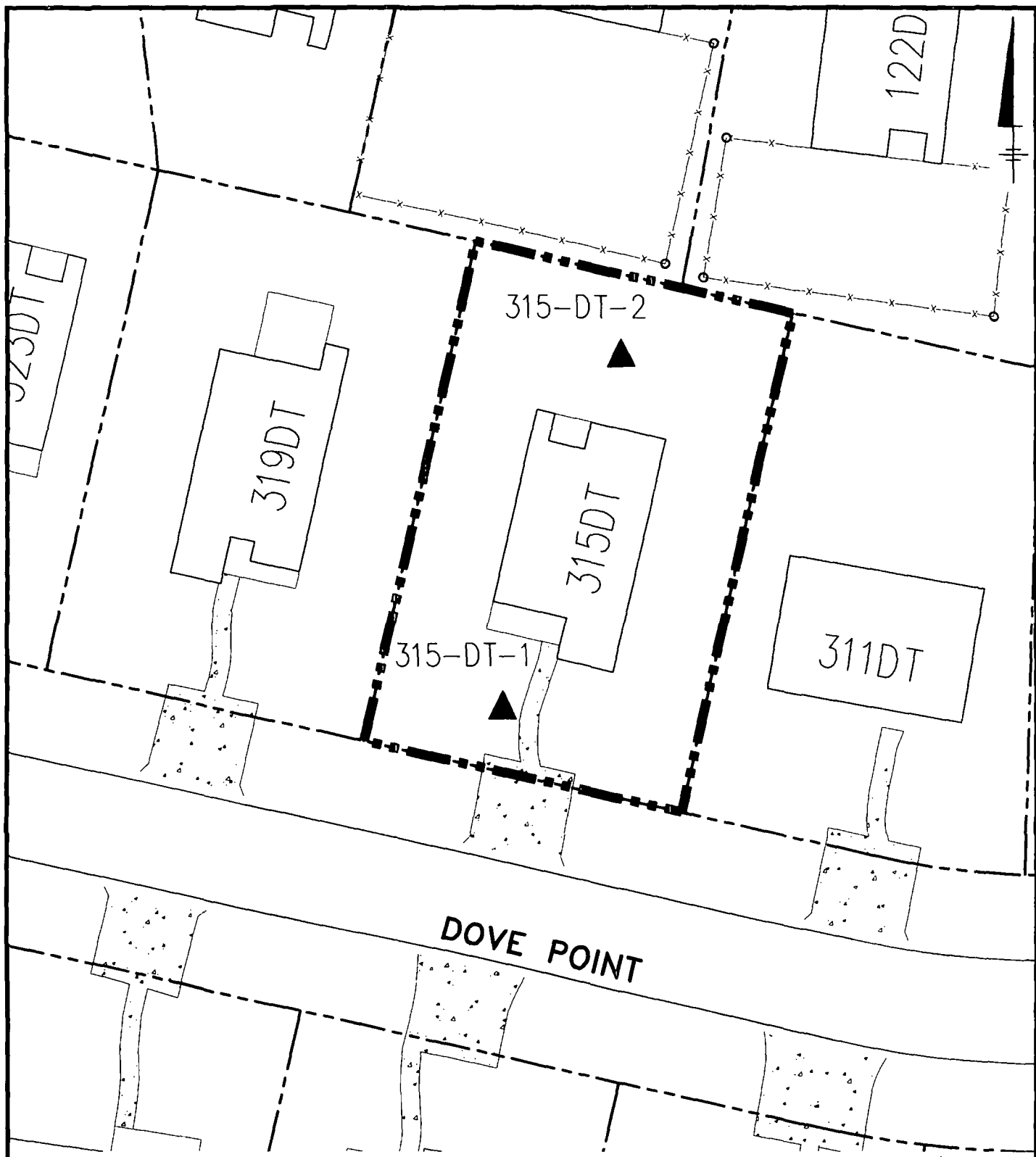
Shaded value exceeds the screening level

**Figure**

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**BBL<sup>®</sup>**  
BLASLAND, BOUCK & LEE, INC.  
engineers, scientists, economists

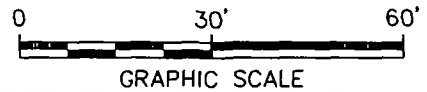




**LEGEND:**

- PROPERTY LINE
- CONCRETE
- x — FENCE LINE

▲ SOIL BORING LOCATION



EXXONMOBIL  
VCC - SOCIAL CIRCLE, GEORGIA

**SAMPLE LOCATION MAP FOR  
315 DOVE POINT**

**BBL**  
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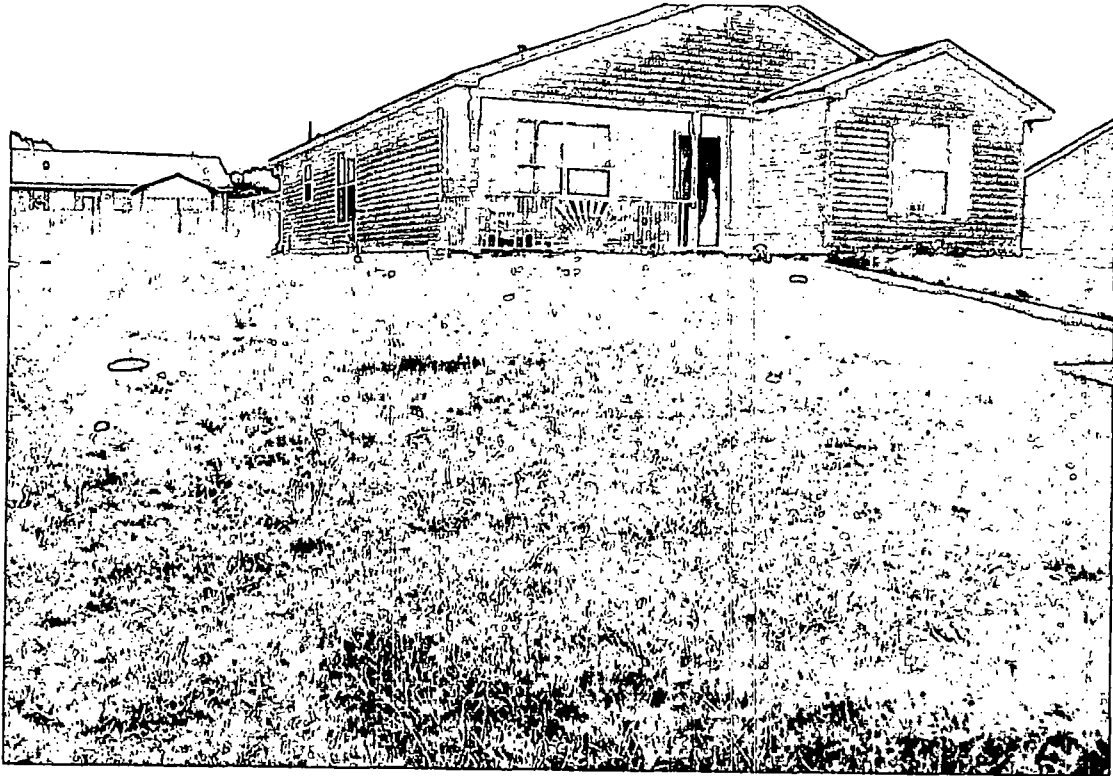
FIGURE  
**315DT**

X: 85533XOP, X02.DWG  
P: PLT-AP1  
10/31/05 CAR-B5-LEE  
R: \CURRENT\OTHER\85533004\PR\85533G40.DWG

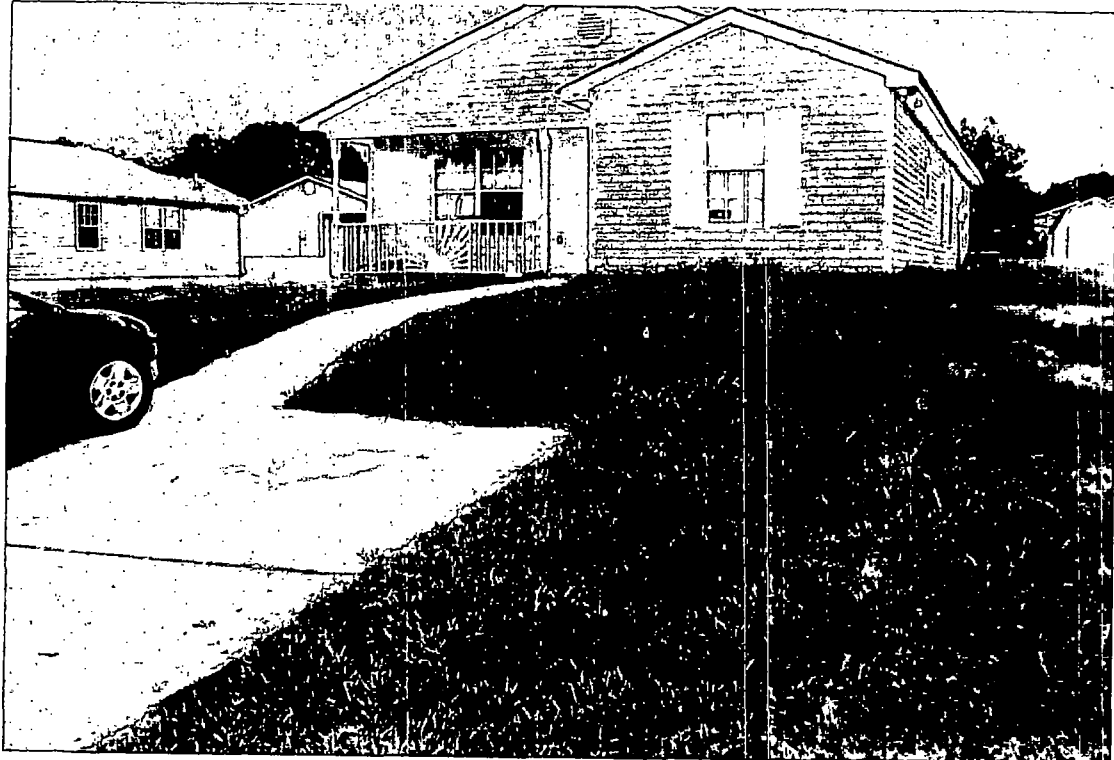
# **Attachment**

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Attachment 1  
Photographs of 315 Dove Point Social Circle, GA

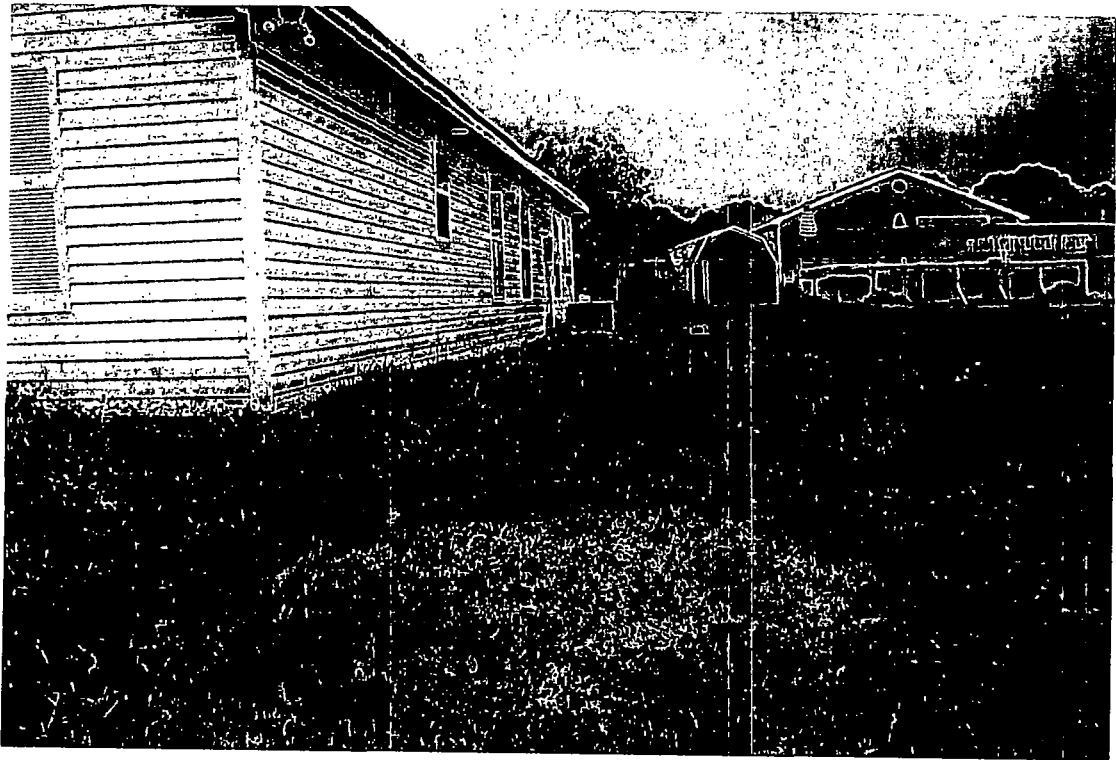


315 Dove Point, southern edge looking north.

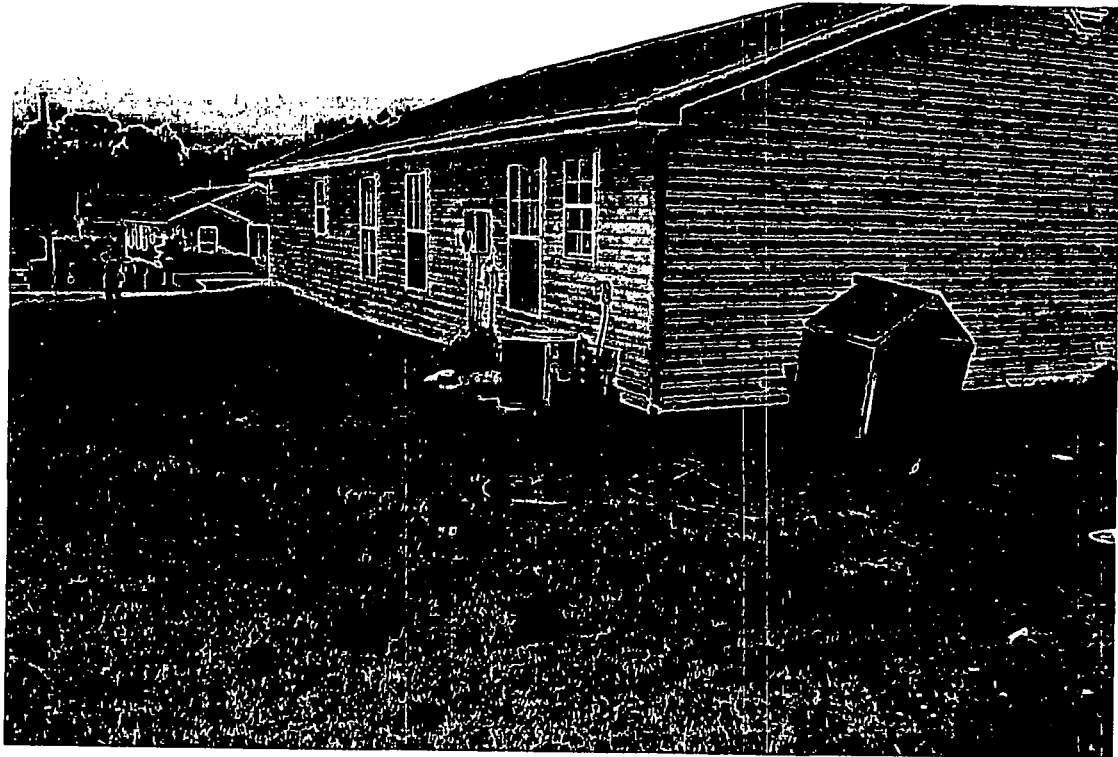


315 Dove Point, southern edge looking north.

Attachment 1  
Photographs of 315 Dove Point Social Circle, GA

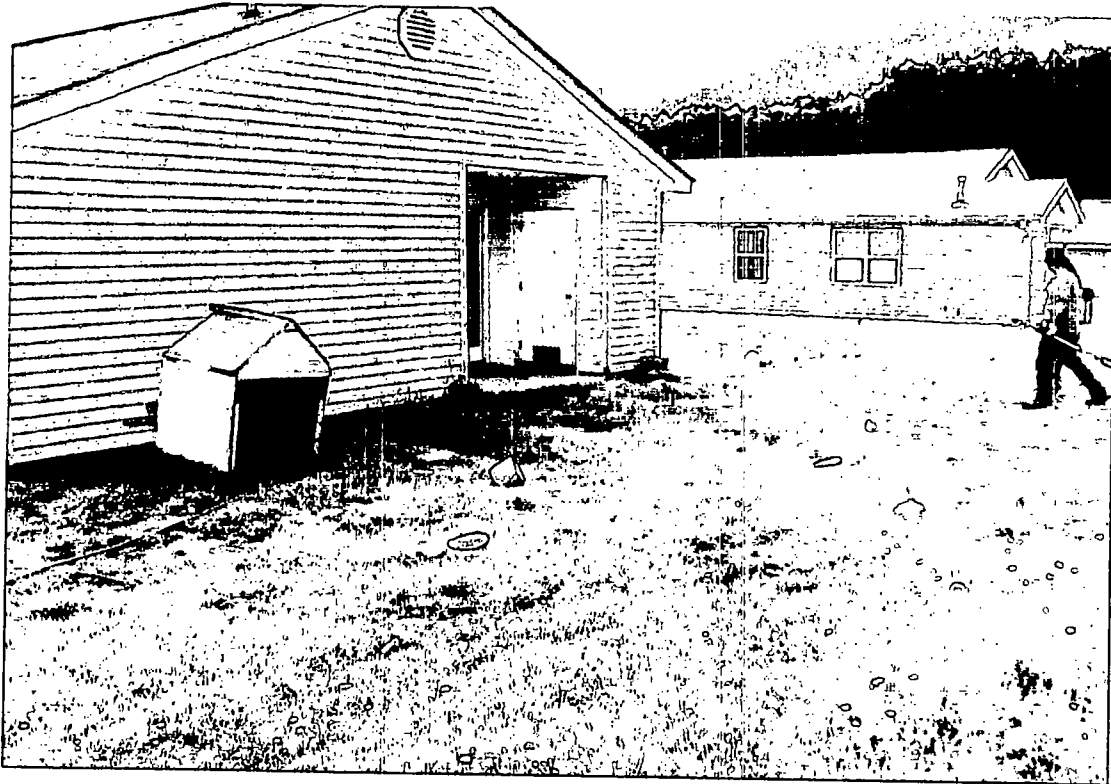


315 Dove Point, eastern edge looking north.

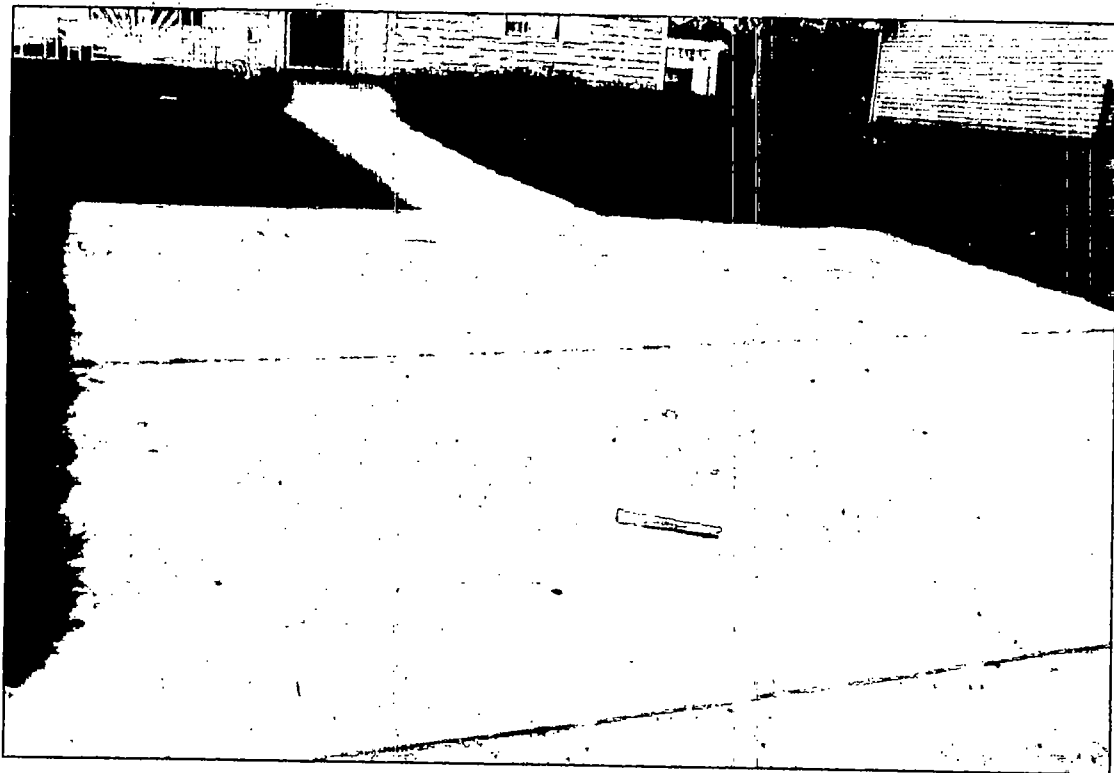


315 Dove Point, northern edge looking south.

Attachment 1  
Photographs of 315 Dove Point Social Circle, GA



315 Dove Point, northern edge looking west.



315 Dove Point, southern edge looking north.